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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/782,854

02/23/2004

Young-ji Lee

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EXAMINER

SHAIFER HARRIMAN, DANT B

ART UNIT

PAPER NUMBER

2134

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/782,854	Applicant(s) LEE, YOUNG-JI	
	Examiner DANT B. SHAFER HARRIMAN	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/01/2006, 09/08/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim(s) 1- 4 is rejected under 35 USC 103 (a) as being obvious over Sudanth, Sudha, "Mobile IPv6", publication date: January 17, 2003 in view of Nyberg et al. (US PG PUB # 2002/0186846 A1).

Sudanth discloses:

1. An RR (Return Routability) method among a mobile node, a home agent and a corresponding node, the method comprising:

- the mobile node transmitting an HoTI (Home Test Init) packet to the home agent, and transmitting a CoTI (Care of Test Init) packet to the corresponding node (Page 11 – 13,

Subheading: Return Routability Procedure);

Sudanth does not explicitly disclose:

1. An RR (Return Routability) method among a mobile node, a home agent and a corresponding node, the method comprising:

- the home agent transmitting the HoTI packet including first key information generated by a specified method to the corresponding node;
- the corresponding node transmitting an HoT (Home of Test) packet including second key information generated by the specified method to the home agent, and transmitting a CoT (Care-of Test) packet encrypted using a secret key generated from the first key information by the specified method to the mobile node;
- the home agent transmitting the secret key generated from the received HoT packet by the specified method to the mobile node; and
- the mobile node decoding the received encrypted CoT packet using the received secret key.

2. The method of claim 1, wherein

- the specified method is a Diffie-Hellman key exchange method using public parameters and secret key parameters to generate the secret key.

3. The method of claim 1, wherein

- the first key information is attached to a mobile options field of the HoTI packet.

4. The method of claim 1, wherein

- the second key information is attached to a mobile options field of the HoT packet.

However, Nyberg discloses:

1. An RR (Return Routability) method among a mobile node, a home agent and a corresponding node, the method comprising:

- the home agent transmitting the HoTI packet including first key information generated by a specified method to the corresponding node (Paragraphs: 0017 & 0027);

- the corresponding node transmitting an HoT (Home of Test) packet including second key information generated by the specified method to the home agent, and transmitting a CoT (Care-of Test) packet encrypted using a secret key generated from the first key information by the specified method to the mobile node (Paragraphs: 0017 & 0027);
- the home agent transmitting the secret key generated from the received HoT packet by the specified method to the mobile node (Paragraphs: 0017 & 0027); and
- the mobile node decoding the received encrypted CoT packet using the received secret key (Paragraphs: 0017 & 0027).

2. The method of claim 1, wherein

- the specified method is a Diffie-Hellman key exchange method using public parameters and secret key parameters to generate the secret key (Paragraphs: 0017 & 0027).

3. The method of claim 1, wherein

- the first key information is attached to a mobile options field of the HoTI packet (Paragraphs: 0017 & 0027).

4. The method of claim 1, wherein

- the second key information is attached to a mobile options field of the HoT packet (Paragraphs: 0017 & 0027).

Sudanth and Nyberg are analogous art because they are from the “same field of endeavor,” which is the field of secure communication with multiple devices through encrypted data packets in an insecure communication network.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Sudanth and Nyberg before him or her, to modify the return routability procedure of Sudanth to include the encryption of data by sending a first key information to a second device, which in turn will use the first key information to create a second secret key to send to the first device so that the first key can decrypt the content or data sent from the second device to the first device of Nyberg.

The suggestion/motivation for doing so would have been to see **KSR v. Teleflex**, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007).

Claim(s) 1, 5, 6 is rejected under 35 USC 103 (a) as being obvious over Sudanth, Sudha, "Mobile IPv6", publication date: January 17, 2003 in view of Fink et al. (US Patent # 7043633 B1).

Sudanth discloses:

1. An RR (Return Routability) method among a mobile node, a home agent and a corresponding node, the method comprising:

- the mobile node transmitting an HoTI (Home Test Init) packet to the home agent, and transmitting a CoTI (Care of Test Init) packet to the corresponding node (Page 11 – 13, Subheading: Return Routability Procedure);

Sudanth does not explicitly disclose:

5. The method of claim 1, wherein

- the encryption method uses a DES (Data Encryption Standard) algorithm.

6. The method of claim 1, wherein

- the encryption method uses a triple DES (Data Encryption Standard) algorithm.

However, Fink discloses:

5. The method of claim 1, wherein

- the encryption method uses a DES (Data Encryption Standard) algorithm (Col. 8, lines 3 - 19).

6. The method of claim 1, wherein

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- the encryption method uses a triple DES (Data Encryption Standard) algorithm (Col. 8, lines 3 - 19).

Sudanth and Fink are analogous art because they are from the “same field of endeavor,” which is the field of secure communication with multiple devices through encrypted data packets in an insecure communication network.

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Sudanth and Fink before him or her, to modify the return routability procedure of Sudanth to include the applying of the data encryption standard of data packets that are sent between devices of Fink.

The suggestion/motivation for doing so would have been to please see **KSR v. Teleflex**, 127 S.Ct. 1727, 1740, 82 USPQ2d 1385, 1396 (2007).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANT B. SHAFER HARRIMAN whose telephone number is (571)272-7910. The examiner can normally be reached on Monday - Thursday: 8:00am - 5:30pm Alt.Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dant B Shaifer - Harriman /
Examiner, Art Unit 2134

3/19/2008

/Kambiz Zand/

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Supervisory Patent Examiner, Art Unit 2134